

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 2

**In the claims:**

Please amend claims 1, 5, 7, 9-10, 12, 18, 25, 27-30, 35-37, and 43 under the provisions of revised 37 C.F.R. §1.121 as follows.

--1. (currently amended) An infectious particle complex comprising semi-purified or pure SV40 VP1 capsid protein or a mixture of SV40 VP1 capsid protein and at least one other SV40 capsid protein; and a purified recombinant nucleic acid constituent packaged therein, wherein the which nucleic acid constituent is not a nucleoprotein and is selected from the group consisting of:

- (a) a purified exogenous DNA, or a purified exogenous DNA encoding an exogenous protein or peptide, or a purified exogenous DNA encoding RNA;
- (b) a vector comprising any of the purified exogenous DNAs of (a);
- (c) a purified exogenous RNA, or a purified exogenous RNA encoding an exogenous protein or peptide;
- (d) a vector comprising any of the purified exogenous RNAs of (c); and
- (e) a purified exogenous antisense RNA, purified exogenous ribozyme RNA or a purified exogenous RNA or purified exogenous DNA which inhibits or prevents the expression of undesired protein or proteins in a mammalian cell;

and further comprising operatively linked elements sufficient for one or more of the following:

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 3

- (i) replication of said constituent; or
- (ii) expression of said constituent; or in subcase (e)
- (iii) prevention of expression of said undesired protein or proteins;

in said mammalian cell,

wherein the ~~infectivity of the~~ recombinant nucleic acid packaged in the infectious particle complex ~~recombinant nucleic acid~~ is increased more infectious relative to ~~the infectivity of~~ unpackaged recombinant nucleic acid.--

--2. (previously presented) The complex according to Claim 1, further comprising additional SV40 protein or proteins, preferably SV40 agnoprotein.--

--3. (cancelled)--

--4. (previously presented) The complex according to Claim 1, comprising a mixture of three semi-purified or pure SV40 capsid proteins.--

--5. (currently amended) The complex according to Claim 1, wherein said other SV40 capsid protein is semi-purified or pure VP2 or ~~VPS~~ VP3.--

--6. (previously presented) The complex according to Claim 1, wherein said recombinant nucleic acid constituent is:  
(a) purified exogenous circular or linear DNA;

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 4

- (b) purified exogenous circular or linear DNA encoding a protein or peptide; or
- (c) purified exogenous circular or linear DNA encoding RNA.--

- 7. (currently amended) The complex according to Claim 6, wherein said purified exogenous DNA is DNA which encodes a protein or peptide, wherein said protein or peptide is not made or contained in ~~said~~ a mammalian cell prior to infection with the complex, or is purified exogenous DNA which encodes a protein or peptide, wherein said protein or peptide is made or contained in said cell in an amount insufficient for proper cell function prior to infection with the complex, or is purified exogenous DNA which encodes a protein or peptide, wherein said protein or peptide is made or contained in said cell in a form inadequate for proper cell function prior to infection with the complex, or encodes a RNA.--
- 8. (previously presented) The complex according to Claim 7, wherein said protein or peptide is an enzyme, a receptor, a structural protein, a regulatory protein or a hormone.--
- 9. (currently amended) The complex according to Claim 1, further comprising SV40 ori DNA sequence as a replication regulatory element and further comprising a purified exogenous DNA sequence encoding one or more regulatory elements sufficient for the expression of said exogenous

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 5

RNA or exogenous protein or peptide in ~~said~~ a mammalian cell.--

--10. (currently amended) The complex according to Claim 1, wherein said constituent is purified exogenous RNA, wherein said purified exogenous RNA is RNA which encodes a protein or peptide which is not made or contained in ~~said~~ a mammalian cell prior to infection with the complex, or is purified exogenous RNA which encodes a protein or peptide which is made or contained in said cell in an amount insufficient for proper cell function prior to infection with the complex, or is purified exogenous RNA which encodes a protein or peptide which is made or contained in said cell in a form, inadequate for proper cell function prior to infection with the complex, said purified exogenous RNA having regulatory elements, including translation signal or signals sufficient for the translation of said protein or peptide in said mammalian cell, operatively linked thereto.--

--11. (previously presented) The complex according to Claim 10, wherein said protein or peptide is an enzyme, a receptor, a structural protein, a regulatory protein or a hormone.-

--12. (currently amended) The complex according to Claim 1, wherein said constituent ~~is~~ encodes an exogenous protein or peptide which is, respectively, a protein or peptide

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 6

which is not made or contained in ~~said~~ a mammalian cell prior to infection with the complex, or is a protein or peptide which is made or contained in said cell in an amount insufficient for proper cell function prior to infection with the complex, or is a protein or peptide which is made or contained in said cell in a form inadequate for proper cell function prior to infection with the complex.--

--13. (previously presented) The complex according to Claim 1, wherein said recombinant constituent is purified exogenous antisense RNA or DNA or purified exogenous ribozyme RNA, or any purified exogenous RNA or purified exogenous DNA which inhibits or prevents the expression of undesired protein or proteins in said mammalian cell.-  
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--14. (cancelled)--

--15. (cancelled)--

--16. (previously presented) The complex according to Claim 1, wherein said cell is a human cell selected from the group consisting of hemopoietic cells, epithelial cells, endothelial cells, liver cells, epidermal cells, muscle cells, tumor cells, nerve cells and germ line cells.--

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 7

- 17. (previously presented) The complex according to Claim 16, wherein said hemopoietic cells are bone marrow cells, peripheral blood cells, or cord blood cells.--
- 18. (currently amended) A method for the *in vitro* construction of SV40 viruses or pseudoviruses comprising a purified exogenous recombinant nucleic acid which is not a nucleoprotein comprising the following steps:
- (a) allowing a semi-purified or pure SV40 VP1 capsid protein or a mixture of VP1 and at least one other SV40 capsid protein to self-assemble into SV40-like particles; and
  - (b) bringing the SV40-like particles assembled in step (a) into contact with said purified exogenous recombinant nucleic acid to give *in vitro* constructed viruses, or into contact with a vector comprising said purified exogenous nucleic acid to give pseudoviruses,
- so as to thereby effect *in vitro* construction of SV40 viruses or pseudoviruses.--
- 19. (previously presented) The method of Claim 18 wherein said *in vitro* constructed SV40 viruses or pseudoviruses are subjected to digestion by nuclease to remove non-packaged DNA.--
- 20. (previously presented) The method according to Claim 18, wherein in step (a) at least one other SV40 protein,

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 8

preferably SV40 agnoprotein, is added to the mixture of said SV40 capsid protein or proteins and said purified exogenous nucleic acid.--

--21. (cancelled)--

--22. (previously presented) The method according to Claim 18, wherein said exogenous nucleic acid is circular or linear DNA.--

--23. (previously presented) The method according to Claim 18, wherein said exogenous nucleic acid is RNA.--

--24. (previously presented) The method according to Claim 18, wherein said exogenous nucleic acid encodes a protein or peptide.--

--25. (currently amended) The method according to Claim 22, wherein said circular or linear DNA is DNA which encodes a protein or peptide, wherein said protein or peptide is not made or contained in said a mammalian cell prior to infection with said SV40 viruses or pseudoviruses, or is circular or linear DNA which encodes a protein or peptide, wherein said protein or peptide is made or contained in said cell in an amount insufficient for proper cell function prior to infection with said SV40 viruses or pseudoviruses, or is circular or linear DNA which encodes a protein or peptide, wherein said protein

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 9

or peptide is made or contained in said cell in a form inadequate for proper cell function prior to infection with said SV40 viruses or pseudoviruses, or is circular or linear DNA which encodes RNA.--

- 26. (previously presented) The method according to Claim 25, wherein said circular or linear DNA encodes a protein or peptide which is an enzyme, a receptor, a structural protein, a regulatory protein or a hormone.--
- 27. (currently amended) The method according to Claim 18, wherein in step (b) SV40 *ori* DNA sequence is added and said exogenous nucleic acid has operably linked thereto a DNA sequence encoding one or more regulatory elements sufficient for the expression of ~~said~~ an exogenous protein encoded thereby in a cell.--
- 28. (currently amended) The method according to Claim 18, wherein said recombinant exogenous nucleic acid is purified exogenous RNA, wherein said purified exogenous RNA is RNA which encodes a protein or peptide, wherein said protein or peptide is not made or contained in ~~said~~ a mammalian cell prior to infection with the complex, or is purified exogenous RNA which encodes a protein or peptide, wherein said protein or peptide is made or contained in an amount insufficient for proper cell function prior to infection with the complex, or is purified exogenous RNA which encodes a protein or



Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 10

peptide, wherein said protein or peptide is made or contained in said cell in a form inadequate for proper cell function prior to infection with the complex, and wherein said purified exogenous RNA has regulatory elements, including translation signal, sufficient for the translation of said protein in said mammalian cell, operatively linked thereto.--

--29. (currently amended) A method for the *in vitro* construction of SV40 viruses or pseudoviruses comprising a constituent, wherein the constituent comprises a purified exogenous protein or peptide, which method comprises the following steps:

(a) allowing a semi-purified or purified SV40 VP1 capsid protein or a mixture of VP1 and at least one other SV40 capsid protein to self-assemble into SV40-like particles; and

(b) bringing the SV40-like particles assembled in step (a) into contact with said purified exogenous protein,

so as to thereby effect *in vitro* construction of SV40 viruses or pseudoviruses comprising said purified exogenous protein or peptide packaged therein.--

--30. (currently amended) The method according to Claim 29, wherein further comprising the step of purifying said SV40 viruses or pseudoviruses ~~are purified~~ from any non-packaged exogenous protein or peptide.--

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 11

- 31. (previously presented) The method according to Claim 29, wherein said exogenous protein or peptide is a naturally occurring or recombinant protein or peptide, a chemically modified protein or peptide, or a synthetic protein or peptide.--
- 32. (previously presented) The method according to Claim 31, wherein said exogenous protein or peptide is a protein or peptide not made or contained in a cell prior to infection with the complex, or is a protein or peptide made or contained in said cell in an amount insufficient for proper cell function prior to infection with the complex, or is a protein or peptide made or contained in said cell in a form inadequate for proper cell function prior to infection with the complex.--
- 33. (previously presented) The method according to Claim 32, wherein said cell is a human cell selected from the group consisting of hemopoietic cells, muscle cells, tumor cells, nerve cells and germ line cells.--
- 34. (previously presented) The method according to Claim 33, wherein said hemopoietic cells are bone marrow cells, peripheral blood cells, cord blood cells, or liver cells.--

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 12

--35. (currently amended) A method for the *in vitro* construction of SV40 pseudoviruses comprising a recombinant nucleic acid constituent wherein said recombinant constituent comprises purified exogenous antisense RNA, or purified exogenous ribozyme RNA or purified exogenous RNA or purified exogenous recombinant DNA which inhibits or prevents the expression of undesired protein or proteins in a mammalian cell and is not a nucleoprotein, comprising the following steps:

(a) allowing a semi-purified or pure SV40 VP1 capsid protein or a mixture of VP1 and at least one other SV40 capsid protein to self assemble into SV40-like particles; and

(b) bringing said SV40-like particles obtained in step (a) into contact with said purified exogenous antisense RNA, or purified exogenous ribozyme RNA, or purified exogenous RNA or purified exogenous recombinant DNA which inhibits or prevents the expression of undesired proteins in a mammalian cell,

so as to thereby effect *in vitro* construction of SV40 pseudoviruses.--

36. (currently amended) The method of Claim 35 wherein, further comprising the step of subjecting said pseudoviruses ~~are subjected~~ to digestion by nuclease to remove non-packaged DNA.

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 13

- 37. (currently amended) The method according to Claim 35, wherein in step (a) at least one other SV40 protein, preferably SV40 agnoprotein, is added to the ~~mixture of SV40 capsid protein or proteins and the purified exogenous antisense RNA or purified exogenous ribozyme RNA or purified exogenous RNA or purified exogenous DNA~~ semi-purified or pure SV40 VP1 capsid protein or the mixture of VP1 and at least one other SV40 capsid protein.--
- 38. (cancelled)--
- 39. (cancelled)--
- 40. (cancelled)--
- 41. (previously presented) A mammalian cell infected with the complex of Claim 1.--
- 42. (previously presented) The infected cell according to Claim 41, wherein the cell is a human cell selected from the group consisting of hemapoietic cells, muscle cells, tumor cells, nerve cells and germ line cells.--
- 43. (currently amended) An *in vitro* method of transforming a purified exogenous DNA, purified exogenous RNA, purified exogenous antisense RNA, purified exogenous ribozyme RNA, ~~purified exogenous protein or peptide~~ into a cell

Applicants: Ziv Sandalon et al.  
Serial No.: 09/068,293  
Filed: May 6, 1998  
Page 14

comprising infecting said cell with the complex of Claim 1.--

--44. (cancelled)--

--45. (previously presented) A composition comprising an effective amount of the complex of Claim 1 in a pharmaceutically-acceptable carrier.--

--46. (previously presented) A composition comprising an effective amount of the infected cells according to Claim 41, in a pharmaceutically-acceptable carrier.--

--47. (previously presented) A complex comprising semi-purified or pure SV40 VPI capsid protein or a mixture of VPI and at least one other SV40 capsid protein, and a constituent, wherein the constituent is a purified exogenous protein or peptide.--